REVIEWS.

CLINICAL LECTURES ON IMPORTANT SYMPTOMS. By THOMAS GRAINGER STEWART, M.D. Edinburgh; Professor of the Practice of Physic and of Clinical Medicine in the University of Edinburgh. FASCICULUS II. ON ALBUMINURIA. 8vo. pp. 249. Edinburgh: Bell & Bradfute, 1888.

SOME years have elapsed since the first fasciculus of the author's *Clinical Lectures on Important Subjects* was published. The symptom treated of in that series was "Giddiness." Professor Stewart informs us in the preface that the lectures comprised in the present series have been delivered at various times during the past two years, and that, as we well recall, several of them have appeared in the journals. They embody his present views regarding the chief clinical questions discussed in his book on *Bright's Diseases of the Kidneys*, the second edition of which has been for many years out of print, and to some extent, therefore, fulfil the desire of the profession that he should issue a third edition of that work. But they fulfil it to some extent only, seeing that they approach the subject exclusively from the clinical side. We desire the mature views of the author upon the whole subject of the diseases of the kidneys, their causation, their pathological histology, their natural history, their relationships to other pathological states, both local and general, their treatment and prevention, their termination, and their pathological and clinical classification; and for this reason we may still look forward to the appearance of a third edition of the author's work. Meanwhile, we gratefully accept these lectures. They are eminently practical and instructive. There is a certain advantage in thus tracing a symptom, common to many derangements, *back* to its various sources. It helps to all-around views of a subject. One thinks of the shield in the fable, one side of which was gold, the other silver. He who has passed it adds to his knowledge of it by retracing his steps to look on it again.

They are, to a great extent, based upon original work undertaken to solve mooted questions in the etiology and symptomatology of diseases of the kidneys, and represent an amount of labor not on first consideration apparent to those who have not undertaken similar studies.

A list of the various forms of albumen and allied substances found in the urine and the tests for them, is followed by a critical study of the relative delicacy of the tests for serum-albumen. The author does not employ the word *albumin*, as is now commonly done, to designate serum-albumen.

The results show that the *boiling test*, carefully applied, is an excellent one, revealing the presence of so little as 0.00218 of a grain per ounce, and that *heat*, with the previous addition of a little acetic acid, is still more delicate, showing 0.00131 of a grain per ounce.

The *cold nitric acid* test is of inferior delicacy, not giving a distinct reaction with less than 0.01311 of a grain of albumen per ounce.

Picric acid proves the most delicate test, giving a faint, but perceptible reaction up to 0.00015 per cent., or 0.000655 of a grain per ounce.

We are fully in accord with the author, however, in regard to the relative value of the various tests, namely, that it by no means coincides with their sensitiveness. The more delicate of them are to be used with caution; little importance is to be attached to faint indications obtained by their use, and albuminuria is rarely a serious condition unless it is sufficiently pronounced to be made out by the cold nitric acid test.

We gather from the context that Professor Stewart is in the habit of using the cold nitric acid test and controlling it, when no reaction is obtained, by the more delicate test of picric acid.

For the quantitative analysis of albumen, the author's experience coincides with that of Dr. George Johnson, namely, that *Esbach's method*, as compared with *Sir William Roberts's dilution process* and the *percentage method of Dr. Oliver*, possesses the advantage of greater accuracy, yielding results more closely corresponding to these obtained by the elaborate drying and weighing process, which is not available for ordinary clinical work.

An elaborate series of investigations undertaken to determine the frequency of albuminuria and the circumstances under which it may occur in persons apparently healthy, gave results which the author formulates as follows:

"1. That there is no sufficient proof that albumen is normally discharged from the human kidneys.

"2. That albuminuria is much more common among presumably healthy people than was formerly supposed, being demonstrable by delicate tests in nearly one-third of those examined.

"3. That the existence of albuminuria is not of itself a sufficient ground for the rejection of a proposal for life insurance.

"4. That traces of albumen are not infrequently present in the urine passed during the first days of life.

"5. That, excepting as shown above, the frequency of albuminuria increases as life advances; being rare in children and young adults, and common in men at or above sixty years of age.

"6. That it is more common among those whose occupations involve arduous bodily exercise than among those who have easy work.

"7. That albuminuria frequently follows the taking of food, especially of breakfast.

"8. That moderate muscular effort rather diminishes than increases albuminuria, except in rare cases.

"9. That violent or prolonged exertion often induces albuminuria.

"10. That cold bathing produces or increases it in some individuals.

"11. That the discharge of peptones from the kidneys is exceedingly rare in the presumably healthy."

A similar series, undertaken to determine the incidence of albuminuria among the sick, resulted in the conclusions embodied in the following statements:

"1. That as in health, so in disease, albuminuria is much more common than is generally supposed.

"2. That it is more common among patients of adult age than among children.

"3. That cases of Bright's disease do not account for one-half of the cases of albuminuria met with in practice.

"4. That they account for more than any other individual cause.

"5. That next to them rank cases induced by cardiac and other maladies affecting the circulation, and those due to the accidental admixture of blood, pus, or other albuminous fluid with the urine.

"6. That so far as this series of observations shows, the various forms of functional albuminuria are rare.

"7. That in waxy and cirrhotic diseases of the kidneys, the quantity of albumen is at first so slight as to be shown only by picric acid.

"8. That usually in these when advanced and in renal inflammation, the albumen is more abundant than in other varieties of albuminuria.

"9. That in the digestive and nervous cases, and those due to high temperature, the quantity is often so small as only to be discovered by picric acid."

The author sums up a most discriminating review of the theories in regard to the pathology of albuminuria, in these words:

"I would have you believe that albuminuria is very often due to changes of an inflammatory character in the epithelium of the tubes and in the stroma of the organ, and that in a very large proportion of the cases in which it occurs in practice it is dependent upon this cause; that increased blood-pressure is a factor of some importance; that increased permeability of the filtering apparatus induces it in many instances; and that there may be some conditions of the blood which account for it or favor its occurrence."

Then follow lectures upon albuminuria from inflammation of the kidney, from cirrhosis of the kidney, from waxy or amyloid degeneration; all abundantly illustrated by cases drawn from the author's rich experience in this field of clinical work.

Equally interesting and important are his views concerning the albuminuria from fever and other causes; but it is to the lecture upon those albuminurias which have been designated variously by different writers as functional, intermittent, dietetic, cyclical albuminuria, and the albuminuria of adolescence, that those familiar with the subject will turn with especial interest. Here is a field that our author has tilled with a diligence his own.

Four categories may be distinguished with advantage. There are, first, paroxsymal albuminuria; second, dietetic albuminuria; third, albuminuria from muscular exertion; and, fourth, simple persistent albuminuria. These forms may run into one another and mutually overlap; they may succeed each other in the same individual from time to time; they may and they frequently do occur in individuals who otherwise have excellent health, and they may vanish altogether, or may recur from time to time for years without entailing serious consequences. But the prognosis is not in all cases so hopeful. The author admits that the culmination of such cases in organic disease of the kidneys does occur, but thinks it must be rare. Dr. George Johnson and Dr. Clement Dukes believe that a proportion of the cases of paroxysmal albuminuria are either Bright's disease in its incipient stages, or ultimately run into that condition.

In view of this possibility, paroxysmal albuminuria must be regarded as a significant, often as a serious symptom.

Moxon's paper in *Guy's Hospital Reports* appeared in 1878; the greater part, in fact all the exact investigations into this group of albuminurias have been made since this date; Pavy's article on cyclic albuminuria was published in 1885. The subsequent history of many of the cases is too brief as yet to warrant positive assertions in regard to the whole clinical course of these forms. When the time for this shall have elapsed, the group of "albuminurias not dangerous to life" will probably appear smaller than at present.

Accidental albuminuria is next briefly discussed. Then follow lectures upon the differential diagnosis and the prognosis in albuminuria, on diet, and on the effects of medicines. The author's observations on the subject of prognosis are very practical and suggestive; his views on the effects of various diets are based upon exact investigations, and, therefore, possess a positive value as compared with the vague statements current in text-books; the same may be said of his conclusions in regard to the power of medicines in controlling the output of albumen by diseased kidneys—

> "I have satisfied myself, by a long series of careful observations, that we have no right to credit any drug with the power of directly diminishing the discharge of albumen."

This is, at present, the opinion of observant physicians at large. Yet it must not be looked upon as a pessimistic view of the subject. To abandon the effort to diminish *directly* the loss of albumen by drugs, an effort shown over and over again to be useless by the ablest therapeutists, and devote their energies to methods of treatment abundantly proved to be of general benefit to the patient and so *indirectly* favorable to the course of the renal affection is, in fact, a wholesome gain in the management of these diseases.

In regard to climate, the author writes:

> "In the mixed forms of organic renal disease, the treatment must be determined according to the preponderating element. In all of them, whether combined or not, the choice of climate is of much importance. When it is possible, these patients should avoid cold and damp districts. It is well for them to winter in the south of Europe, in Algiers, or in Egypt; and practitioners in high altitudes, such as Davos, find that renal cases should not try treatment there. The only exception to this rule is afforded by purely waxy cases which have resulted from chronic phthisis, and in which the advantage to be derived, in respect of the pulmonary disease, tells favorably upon the kidney also."

The arrangement of the data and results of investigations in the form of tables constitutes a valuable feature of the book, and saves space and needless repetition.

In conclusion, we regard these lectures in their present form as an important contribution to the literature of clinical medicine in the broadest sense.

J. C. W.

ESSAYS ON HYSTERIA, BRAIN TUMOR, AND SOME OTHER CASES OF NERVOUS DISEASE. By MARY PUTNAM JACOBI. 8vo. pp. 208. New York: G. P. Putnam's Sons, 1888.

IN this little volume, Dr. Jacobi has brought together seven interesting essays, elsewhere published, on various forms of nervous disease, the two subjects mentioned in the title occupying two-thirds of the book. The work is noteworthy from its careful preparation, diligent search of literature, familiarity with the subjects treated, considerable practical